Biochemical Pharmacology

VOLUME 60, 2000

VOLUME CONTENTS, AUTHOR AND SUBJECT INDEX

ELSEVIER

CONTENTS OF VOLUME 60

1 JULY 2000

Commentary

1 Dietary soy-derived isoflavone phytoestrogens: Could they have a role in coronary heart disease prevention?
Matti J. Tikkanen and Herman Adlercreutz

MOLECULAR AND CELLULAR PHARMACOLOGY

7 Stereoselective sulfoxidation of sulindac sulfide by flavin-containing monooxygenases: Comparison of human liver and kidney microsomes and mammalian enzymes
Mitchell A. Hamman, Barbara D. Haehner-Daniels, Steven A. Wrighton, Allan E. Rettie and Stephen D. Hall

19 Status of glutathione and other thiols and disulfides in human plasma
Wayne A. Kleinman and John P. Richie, Jr.

31 Induction of erythroid differentiation of human K562 cells by cisplatin analogs
Nicoletta Bianchi, Federico Ongaro, Cristiano Chiarabelli, Licia Gualandi, Carlo Mischiati, Paola Bergamni and Roberto Gambari

41 Efficient utilization of the reduced folate carrier in CCRF-CEM human leukemic lymphoblasts by the potent antifolate N^{α}-(4-amino-4-deoxypteroyl)-N^{δ}-hemiphthaloyl-L-ornithine (PT523) and its B-ring analogues
Joel E. Wright, Chitra M. Vaidya, Ying-Nan Chen and Andre Rosowsky

47 Ascorbate-dependent protection of human erythrocytes against oxidant stress generated by extracellular diazobenzene sulfonate
James M. May, Zhi-chao Qu, Jason D. Morrow and Charles E. Cobb

55 Kinetics and mechanism of the reaction of aminoguanidine with the α-oxoaldehydes glyoxal, methylglyoxal, and 3-deoxyglucosone under physiological conditions
Paul J. Thornalley, Alexander Yurek-George and Ongian K. Argirov

67 Down-regulation by troglitazone of hepatic tumor necrosis factor-α and interleukin-6 mRNA expression in a murine model of a non-insulin-dependent diabetes
Stephan Sigrist, Marc Bedoucha and Urs A. Boelsterli

77 Bcl-2 phosphorylation in a human breast carcinoma xenograft: A common event in response to effective DNA-damaging drugs
Graziella Pratesi, Donatella Polizzi, Paola Perego, Laura Dal Bo and Franco Zunino

83 Antisense inhibition of P-glycoprotein expression using peptide–oligonucleotide conjugates
Anna Astriab-Fisher, Dimitri S. Sergueev, Michael Fisher, Barbara Ramsay Shaw and Rudolph L. Juliano

91 Additive inhibitory effect of calcipotriol and anthralin on ribonuclease P activity
Evangelina Papadimou, Alexandar Monastirli, Dioysios Tsambaos and Denis Drainas

CHEMOTHERAPY AND METABOLIC INHIBITORS

95 Inactivation of creatine kinase by Adriamycin® during interaction with horseradish peroxidase
Toshiaki Miura, Sanae Muraoka and Yukio Fujimoto

101 Topoisomerase II cleavable complex formation within DNA loop domains
Joseph M. Lambert and Daniel J. Fernandes

NEUROSCIENCE

111 Apoptosis induction by a dopaminergic neurotoxin, 1-methyl-4-phenylpyridinium ion (MPP^+), and inhibition by epidermal growth factor in GH3 cells
Norihiro Yoshinaga, Toshihiko Murayama and Yasuyuki Nomura

GENE EXPRESSION AND DEVELOPMENT

121 High-level expression of human butyrylcholinesterase gene in *Bombyx mori* and biochemical-pharmacological characteristic study of its product
Wan-Li Wei, Jun-Chuan Qin and Man-Ji Sun

127 Characterization of the mouse nuclear orphan receptor TR2-*11* gene promoter and its potential role in retinoic acid-induced P19 apoptosis
Chih-Hao Lee and Li-Na Wei

GASTROINTESTINAL AND RENAL PHARMACOLOGY

137 Lack of a role for inducible nitric oxide synthase in an experimental model of nephrotic syndrome
Lisa M. Walker, Sudhir V. Shah and Philip R. Mayeux

145 Subcellular localization of neuronal nitric oxide synthase in rat small intestine
Lieve A. P. Van Geldre, Norbert H. Fraeyman and Romain A. Lefebvre

15 JULY 2000

Commentary

155 Use of echinacea in medicine
Susan P. Percival

Molecular and Cellular Pharmacology

159 Rapid desensitization and slow recovery of the cyclic AMP response mediated by histamine H_2 receptors in the U937 cell line
Bibiana Lemos Legnazzi, Carina Shayo, Federico Monczor, Maria E. Martin, Natalia Fernandez, Andres Brodsky, Alberto Baldi and Carlos Davio

167 Ligand-independent activation of estrogen receptor function by 3,3′-diindolylmethane in human breast cancer cells
Jacques E. Riby, Grace H. F. Chang, Gary L. Firestone and Leonard F. Bjeldanes

179 Deficient homologous desensitization of formyl peptide receptors stably expressed in undifferentiated HL-60 cells
Madhavi J. Rane, Eric R. Prossnitz, John M. Arthur, Richard A. Ward and Kenneth R. McLeish

189 Effect of 3′-methoxy-4′-nitroflavone on benzo[*a*] pyrene toxicity: Aryl hydrocarbon receptor-dependent and -independent mechanisms
Stephen D. Dertinger, Hoffman B. Lantum, Allen E. Silverstone and Thomas A. Gasiewicz

197 Inhibition of rabbit platelet aggregation by nucleoside 5′-alkylphosphates: Correlation with inhibition of agonist-induced calcium influx
Junko Sugatani, Takahiro Iwai, Manabu Watanabe, Kiyotaka Machida, Toshio Tanaka, Toshio Maeda and Masao Miwa

207 Role of NAD(P)H:quinone oxidoreductase 1 (DT diaphorase) in protection against quinone toxicity
Pius Joseph, Delwin J. Long II, Andres J. P. Klein-Szanto and Anil K. Jaiswal

215 Role of organic cation transporters in the renal secretion of nucleosides
Rong Chen and J. Arly Nelson

221 Studies on the mechanism of the inhibition of human leukaemia cell growth by dietary isothiocyanates and their cysteine adducts *in vitro*
Ke Xu and Paul J. Thornalley

233 Association of tamoxifen biliary excretion rate with prior tamoxifen exposure and increase *mdr1b* expression
Joan Riley, Jerry Styles, Richard D. Verschoyle, Lesley A. Stanley, Ian N. H. White and Timothy W. Grant

Chemotherapy and Metabolic Inhibitors

241 Pharmacological modulation of the bystander effect in the herpes simplex virus thymidine kinase/ganciclovir gene therapy system: Effects of dibutyryl adenosine 3′,5′-cyclic monophosphate, A-glycyrrhetinic acid, and cytosine arabinoside
Pierre Alain Robe, Frédéric Princen, Didier Martin, Brigitte Malgrange, Achille Stevenaert, Gustave Moonen, Jacques Gielen, Marie-Paule Merville and Vincent Bours

Neuroscience

231 Actions of epoxyeicosatrienoic acid on large-conductance Ca^{2+}-activated K^+ channels in pituitary GH_3 cells
Sheng-Nan Wu, Hui-Fang Li and Hung-Ting Chiang

Hormones and Growth Factors

263 Improvement by aminoguanidine of insulin secretion from pancreatic islets grafted to syngeneic diabetic rats
Shinsuke Hiramatsu, Kaoru Inoue, Yuji Tajirl and Valdemar Grill

Inflammation and Immunopharmacology

269 Effectiveness of batimastat, a synthetic inhibitor of matrix metalloproteinases, in neutralizing local tissue damage induced by BaP1, a hemorrhagic metalloproteinase from the venom of the snake *Bothrops asper*
Teresa Escalante, Aida Franceschi, Alexandra Rucavado and José María Gutiérrez

275 Tissue-specific gene expression of heme oxygenase-1 (HO-1) and non-specific δ-aminolevulinate synthase (ALAS-N) in a rat model of septic multiple organ dysfunction syndrome
Tsutomu Suzuki, Toru Takahashi, Akira Yamasaki, Tadao Fujiwara, Masahisa Hirakawa and Reiko Akagi

GASTROINTESTINAL AND RENAL PHARMACOLOGY

285 Effect of phenobarbital on intralobular expression of CYP2B1/2 in livers of rats: Difference in the expression between single and repetitive administrations
Jun Watanabe, Hiroko Mondo, Yasuharu Takamori, Kazuo Takeda and Shinsuke Kanamura

1 AUGUST 2000

Commentary

293 On the recognition of mammalian microsomal cytochrome P450 substrates and their characteristics: Towards the prediction of human P450 substrate specificity and metabolism
David F. V. Lewis

MOLECULAR AND CELLULAR PHARMACOLOGY

307 Induction of apoptosis by *Hibiscus* protocatechuic acid in human leukemia cells via reduction of retinoblastoma (RB) phosphorylation and Bcl-2 expression
Tsui-Hwa Tseng, Ta-Wei Kao, Chia-Yih Chu, Fen-Pi Chou, Wei-Long Lin and Chau-Jong Wang

317 Effect of calmidazolium analogs on calcium influx in HL-60 cells
Jacquie L. Harper and John W. Daly

325 Inactivation of aldophosphamide by human aldehyde dehydrogenase isozyme 3
Francesco Giorgianni, Peter K. Bridson, Brian P. Sorrentino, Jörg Pohl and Raymond L. Blakley

339 Selective inhibition of bacterial dihydroorotate dehydrogenases by thiadiazolidinediones
Jovita Marcinkeviciene, M. John Rogers, Lisa Kopcho, Wenjun Jian, Kathy Wang, Dennis J. Murphy, Jonathan Lippy, Steven Link, Thomas D. Y. Chung, Frank Hobbs, Tasir Haque, George L. Trainor, Andrew Slee, Andrew M. Stern and Robert A. Copeland

343 Hyperphosphorylation of the asialoglycoprotein receptor in isolated rat hepatocytes following ethanol administration
Benita L. McVicker, Dean J. Tuma and Carol A. Casey

353 Characterisation of multidrug-resistant Ehrlich ascites tumour cells selected *in vivo* for resistance to etoposide
Dorte Nielsen, Christian Maare, Jens Eriksen, Thomas Litman, Ellen Friche and Torben Skovsgaard

363 Characterisation of non-P-glycoprotein multidrug-resistant Ehrlich ascites tumour cells selected for resistance to mitoxantrone
Dorte Nielsen, Jens Eriksen, Christian Maare, Thomas Litman, Erik Kjærsgaard, Torben Plesner, Ellen Friche and Torben Skovsgaard

371 Induction of apoptosis by the bis-Pt(III) complex $(Pt_2(2\text{-mercaptopyrimidine})_4Cl_2]$
Víctor M. González, Miguel A. Fuertes, María J. Pérez-Alvarez, Gemma Cervantes, Virtudes Moreno, Carlos Alonso and José M. Pérez

381 Inhibition of platelet-derived growth factor-induced mitogenesis by phosphodiesterase 3 inhibitors: Role of protein kinase A in vascular smooth muscle cell mitogenesis
Michael T. Osinski and Karsten Schrör

389 Oxidative derangement in rat synaptosomes induced by hyperglycaemia: Restorative effect of dehydroepiandrosterone treatment
Manuela Aragno, Silvia Parola, Elena Tamagno, Enrico Brignardello, Roberta Manti, Oliviero Danni and Giuseppe Boccuzzi

397 Relation of cell proliferation to expression of peripheral benzodiazepine receptors in human breast cancer cell lines
Anne Beinlich, Renate Strohmeier, Manfred Kaufmann and Herbert Kuhl

CHEMOTHERAPY AND METABOLIC INHIBITORS

403 Differential inhibition of the human cell DNA replication complex-associated DNA polymerases by the antimetabolite 1-β-D-arabinofuranosylcytosine triphosphate (ara-CTP)
Suhua Han, Robert J. Hickey, Timothy D. Tom, Philip W. Wills, Juhani E. Syväoja and Linda H. Malkas

413 Effects of *MDR1* and *MDR3* P-glycoproteins, MRP1, and BCRP/MXR/ABCP on the transport of ^{99m}Tc-tetrofosmin
Wendy S. Chen, Kathryn E. Luker, Julie L. Dahlheimer, Christina M. Pica, Gary D. Luker and David Piwnica-Worms

427 Modulation of 5-fluorouracil host toxicity by 5-(benzyloxybenzyl)barbituric acid acyclonucleoside, a uridine phosphorylase inhibitor, and 2′,3′,5′-tri-O-acetyluridine, a prodrug of uridine
Osama M. Ashour, Fardos N. M. Naguib, Raymond P. Panzica, Omar N. Al Safarjalani and Mahmoud H. el Kouni

NEUROSCIENCE

433 Effects of extract and ingredients isolated from *Magnolia obovata* thunberg on catecholamine secretion from bovine adrenal chromaffin cells
Eiichi Tachikawa, Masabumi Takahashi and Takeshi Kashimoto

441 A comparative study of methionine adenosyltransferase activity and regional distribution in mammalian spinal cord
Titti Ekegren, Sten-Magnus Aquilonius and Cecilia Gomes-Trolin

STRUCTURAL BIOLOGY

447 16(*R*)-hydroxy-5,8,11,14-eicosaetraenoic acid, a new arachidonate metabolite in human polymorphonuclear leukocytes
Martin M. Bednar, Cordell E. Gross, Maria K. Balazy, Yuri Belosludtsev, Danette W. Colella, John R. Falck and Michael Balazy

15 AUGUST 2000

Commentary

457 Antibiotic efflux pumps
Françoise Van Bambeke, Elisabetta Balzi and Paul M. Tulkens

MOLECULAR AND CELLULAR PHARMACOLOGY

471 Antioxidative properties of natural coelenterazine and synthetic methyl coelenterazine in rat hepatocytes subjected to *tert*-butyl hydroperoxide-induced oxidative stress
Marlène L. N. Dubuisson, Bertrand de Wergifosse, André Trouet, Fernand Baguet, Jacqueline Marchand-Brynaert and Jean-Françoise Rees

479 Determination of the DNA sequences of acetylcholinesterase and butyrylcholinesterase from cat and demonstration of the existence of both in cat plasma
Cynthia F. Bartels, Weihua Xie, Amanda K. Miller-Lindholm, Lawrence M. Schopfer and Oksana Lockridge

489 Multiple levels of regulation of selenoprotein biosynthesis revealed from the analysis of human glioma cell lines
David B. Mansur, Honglin Hao, Vadim N. Gladyshev, Konstantin V. Korotkov, Yajun Hu, Mohamed E. Moustafa, Muhammad A. El-Saadani, Bradley A. Carlson, Dolph L. Hatfield and Alan M. Diamond

499 Inhibition of a phosphodiesterase III in the lysis-sensitive target-induced elevation of cyclic AMP (cAMP) in human natural killer cells
Margaret M. Whalen and Joshua D. Crews

507 *In vitro* metabolism of acitretin by human liver microsomes: Evidence of an acitretinoyl-coenzyme A thioester conjugate in the transesterification to etretinate
Kathleen M. Knights, Rodolfo Gasser and Wolfgang Klemisch

517 Identification of human cytochrome P450 isoforms that contribute to all-*trans*-retinoic acid 4-hydroxylation
Lynda C. McSorley and Ann K. Daly

527 Inhibition of topoisomerase II by the marine alkaloid ascididemin and induction of apoptosis in leukemia cells
Laurent Dassonneville, Nicole Wattez, Brigitte Baldeyrou, Christine Mahieu, Amélie Lansiaux, Bernard Banaigs, Isabelle Bonnard and Christian Bailly

539 Selective inhibition of nitric oxide synthase type 1 by clonidine, an anti-hypertensive drug
Giorgio Venturini, Marco Colasanti, Tiziana Persichini, Emanuela Fioravanti, Rodolfo Federico and Paolo Ascenzi

545 Effects of dexamethasone on mitogen-activated protein kinases in mouse macrophages: Implications for the regulation of 85 kDa cytosolic phospholipase A_2
Karin Gewert, Gösta Hiller and Roger Sundler

553 Distribution of liposome-encapsulated iodixanol in rat liver cells
Rune Kjeken, Grete M. Kindberg and Trond Berg

CHEMOTHERAPY AND METABOLIC INHIBITORS

561 Kinetics of human acetylcholinesterase inhibition by the novel experimental Alzheimer therapeutic agent, tolserine
Mohammad A. Kamal, Nigel H. Greig, Abdullah S. Alhomida and Abdulaziz A. Al-Jafari

571 Reductive activation of mitomycin C by neuronal nitric oxide synthase
Hou-Bo Jiang, Minoru Ichikawa, Aizo Furukawa, Shuhei Tomita and Yoshiyuki Ichikawa

Inflammation and Immunopharmacology

581 Inhibition of *in vitro* lymphoproliferation by three novel iron chelators of the pyridoxal and salicyl aldehyde hydrazone classes
David van Reyk, Shalom Sarel and Nicholas Hunt

589 Roles of mitogen-activated protein kinase pathways for mediator release from human cultured mast cells
Masahiro Kimata, Naoki Inagaki, Toshinobu Kato, Toru Miura, Isao Serizawa and Hiroichi Nagai

595 Inhibition by parthenolide of phorbol ester-induced transcriptional activation of inducible nitric oxide synthase gene in a human monocyte cell line THP-1
Kazunori Fukuda, Yuko Hibiya, Michihiro Mutoh, Yasushi Ohno, Kazuya Yamashita, Seigou Akao and Hisayoshi Fujiwara

Cardiovascular and Pulmonary Pharmacology

601 Protective action of cardiac DT-diaphorase against menadione toxicity in guinea pig isolated atria
Maura Floreani, Eleonora Napoli and Pietro Palatini

1 SEPTEMBER 2000

Commentary

607 Lipid metabolism as a target for potassium channel effectors
Adam Szewczyk and Slawomir Pikula

Molecular and Cellular Pharmacology

615 Effects of cocaine and its oxidative metabolites on mitochondrial respiration and generation of reactive oxygen species
Franziska Boess, Florence M. Ndikum-Moffor, Urs A. Boelsterli and Stephen M. Roberts

625 Role of NADPH:cytochrome P450 reductase in the hypoxic accumulation and metabolism of BRU59-21, a technetium-99m-nitromidazole for imaging tumor hypoxia
Tricia Melo, James R. Ballinger and A. Michael Rauth

635 Suppression of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD)-mediated aryl hydrocarbon receptor transformation and CYP1A1 induction by the phosphatidylinositol 3-kinase inhibitor 2-(4-morpholinyl)-8-phenyl-4*H*-1-benzopyran-4-one (LY294002)
Meng Guo, Aby Joiakim and John J. Reiners, Jr

643 Specific induction of glutathione *S*-transferase GSTM2 subunit expression by epigallocatechin gallate in rat liver
Fen-Pi Chou, Yu-Chuan Chu, Jeng-Dong Hsu, Huei-Ching Chiang and Chau-Jong Wang

651 Inhibition of glucose transport and direct interactions with type 1 facilitative glucose transporter (GLUT-1) by etomidate, ketamine, and propofol: A comparison with barbiturates
Keli N. Stephenson, Richard L. Croxen, Aida El-Barbary, Joseph D. Fenstermacher and Howard C. Haspel

661 Site-directed mutagenesis studies of human A_{2A} adenosine receptors: Involvement of Glu^{13} and His^{278} in ligand binding and sodium modulation
Zhan-Guo Gao, Qiaoling Jiang, Kenneth A. Jacobson and Adriaan P. IJzerman

669 Allosteric modulation of A_{2A} adenosine receptors by amiloride analogues and sodium ions
Zhan-Guo Gao and Adriaan P. IJzerman

677 Induction of apoptosis by a novel intestinal metabolite of ginseng saponin via cytochrome *c*-mediated activation of caspase-3 protease
Sang-Jun Lee, Won-Gil Ko, Jeong-Hee Kim, Jong-Hwan Sung, Sang-Joo Lee, Chang-Kiu Moon and Byung-Hoon Lee

Chemotherapy and Metabolic Inhibitors

687 Effect of administration of 5-(phenylselenenyl)acyclouridine, an inhibitor of uridine phosphorylase, on the anti-tumor efficacy of 5-fluoro-2′-deoxyuridine against murine colon tumor C26-10
Osama M. Ashour, Fardos N. M. Naguib, Naganna M. Goudgaon, Raymond F. Schinazi and Mahmoud H. el Kouni

Neuroscience

693 Inhibition of neuronal nitric oxide synthase activity by 3-[2-[4-(3-chloro-2-methylphenyl)-1-piperazinyl] ethyl]-5,6-dimethoxy-1-(4-imidazolylmethyl)-1*H*-indazole dihydrochloride 3.5 hydrate (DY-9760e), a novel neuroprotective agent *in vitro* and in cultured neuroblastoma cells *in situ*
Kohji Fukunaga, Masao Ohmitsu, Eishichi Miyamoto, Toshiyuki Sato, Masunobu Sugimura, Toshihiro Uchida and Yasufumi Shirasaki

HORMONES AND GROWTH FACTORS

701 Comparison of the relative effects of 1,24-dihydroxyvitamin D_2 [1,24-$(OH)_2D_2$], 1,24-dihydroxyvitamin D_3 [1,24-$(OH)_2D_3$], and 1,25-dihydroxyvitamin D_3 [1,25-$(OH)_2D_3$] on selected vitamin D-regulated events in the rat

Ronald Horst, Siriwan Prapong, Timothy Reinhardt, Nicholas Koszewski, Joyce Knutson and Charles Bishop

STRUCTURAL BIOLOGY

709 Antioxidant activity of the monoamine oxidase B inhibitor lazabemide

R. Preston Mason, Edwin G. Olmstead Jr and Robert F. Jacob

INFLAMMATION AND IMMUNOPHARMACOLOGY

717 Inhibition of nuclear factor-κB activation in mouse macrophages and the RAW 264.7 cell line by a synthetic adenyl carbocyclic nucleoside

Dongxiang Xia, Fuan Wang and Michael J. Parmely

729 Inhibition of C5a-induced neutrophil chemotaxis and macrophage cytokine production *in vitro* by a new C5a receptor antagonist

David R. Haynes, Damien G. Harkin, Leon P. Bignold, Martin J. Hutchens, Stephen M. Taylor and David P. Fairlie

15 SEPTEMBER 2000

Commentary

735 K_{ATP} channels: Linker between phospholipid metabolism and excitability

Thomas Baukrowitz and Bernd Fakler

MOLECULAR AND CELLULAR PHARMACOLOGY

741 Down-regulation of N^+/K^+-ATPase α_2 isoform in denervated rat vas deferens

Luis Eduardo M. Quintas, Afonso Caricati-Neto, Simone S. L. Lafayette, Aron Jurkiewicz and François Noël

749 Induction of oxidative stress and apoptosis in myeloma cells by the aziridine-containing agent imexon

Katerina Dvorakova, Claire M. Payne, Margaret E. Tome, Margaret M. Briehl, Thomas McClure and Robert T. Dorr

759 Expression, maturation, and rhodamine-based fluorescence assay of human cathepsin K expressed in CHO cells

David Claveau, Denis Riendeau and Joseph A. Mancini

771 Induction of mitosis-mediated apoptosis by sodium arsenite in HeLa S3 cells

See-Chang Huang, Chi-Ying F. Huang and Te-Chang Lee

781 Tyrosine phosphorylation of the δ-opioid receptor: Evidence for its role in mitogen-activated protein kinase activation and receptor internalization

H. Kenneth Kramer, Matthew L. Andria, Douglas H. Esposito and Eric J. Simon

793 A single amino acid of the human and rat neurotensin receptors (subtype 1) determining the pharmacological profile of a species-selective neurotensin agonist

Bernadette Cusack, Karen Jansen, Daniel J. McCormick, Thomas Chou, Yuan-Ping Pang and Elliott Richelson

803 *In vitro* effect of retinoids on calcineurin activity

Donna J. Spannaus-Martin and Bruce L. Martin

809 2,2,′3,3′4,4′-hexahydroxy-1,1′-biphenyl-6,6′-dimethanol dimethyl ether (HBDDE)-induced neuronal apoptosis independent of classical protein kinase C α or γ inhibition

Anjili Mathur and Mary Lou Vallano

817 An investigation into the formation of *N*-[2-(dimethylamino)ethyl]acridein-4-carboxamide (DACA) and 6-[2-dimethylamino)ethylamino]-3-hydroxy-7H-indeno[2,1-C]quinolin-7-one dihydrochloride (TAS-103) stabilised DNA topoisomerase I and II cleavable complexes in human leukaemia cells

Kay Padget, Alistair Stewart, Peter Charlton, Michael J. Tilby and Caroline A. Austin

CHEMOTHERAPY AND METABOLIC INHIBITORS

823 Prevention of etoposide-induced apoptosis by proteasome inhibitors in a human leukemic cell line but not in fresh acute leukemia blasts: A differential role of NF-κB activation

Ken-ichiro Watanabe, Masaru Kubota, Keigo Hamahata, Ying-Wei Lin and Ikuya Usami

831 BCRP/MXR/ABCP expression in topotecan-resistant human breast carcinoma cells

Chih-Hsin Yang, Erasmus Schneider, Min-Liang Kuo, Erin L. Volk, Emmanuelle Rocchi and Yao-Chang Chen

839 Early stimulation of acidification rate by novel cytotoxic pyridyl cyanoguanidines in human tumor cells: Comparison with *m*-iodobenzylguanidine

Sara Ekelund, Gunnar Liminga, Fredrik Björkling, Erik Ottosen, Charlotte Schou, Lise Binderup and Rolf Larsson

851 5-Phenylthioacyclouridine: A potent and specific inhibitor of uridine phosphorylase

Mahmoud H. el Kouni, Naganna M. Goudgaon, Mohammad Rafeeq, Omar N. Al Safarjalani, Raymond F. Schinazi and Fardos N. M. Naguib

GENE EXPRESSION AND DEVELOPMENT

857 A transgenic mouse expressing human CYP1A2 in the pancreas

Takaki Ueno, Shinji Tamura, William I. Frels, Magang Shou, Frank J. Gonzalez and Shioko Kimura

GASTROINTESTINAL AND RENAL PHARMACOLOGY

865 Activation of phospholipase C by cholecystokinin receptor subtypes with different G-protein-coupling specificities in hormone-secreting pancreatic cell lines

Ruth H. Paulssen, Norbert Fraeyman and Jon Florholmen

1 OCTOBER 2000

Commentary

877 Protein tyrosine phosphatase-1B in diabetes

Brian P. Kennedy and Chidambaram Ramachandran

MOLECULAR AND CELLULAR PHARMACOLOGY

885 Biochemical and cellular effects of c-Src kinase-selective pyridol[2,3-*d*]pyrimidine tyrosine kinase inhibitors

Alan J. Kraker, Brian G. Hartl, Aneesa M. Amar, Mark R. Barvian, H. D. Hollis Showalter and Charles W. Moore

899 Effect of the aminosteroid U73122 on prostaglandin E_2 production in a murin clonal osteoblast-like cell line, MC3T3-E1

Hans J. Leis, Harald Köfeler, Günther Raspotnig, Doris Zach, Günter Fauler and Werner Windischhofer

905 Mechanism of dibucaine-induced apoptosis in promyelocytic leukemia cells (HL-60)

Kayo Arita, Toshihiko Utsumi, Akio Kato, Tomoko Kanno, Hirotsugu Kobuchi, Bunji Inoue, Jitsuo Akiyama and Kozo Utsumi

917 Aspirin acetylation of βLys-82 of human hemoglobin: NMR study of acetylated hemoglobin tsurumai

Arron S. L. Xu, Yuzo Ohba, Loyda Vida, Richard J. Labotka and Robert E. London

923 Divergent effects of protein kinase C (PKC) inhibitors staurosporine and bisindolymaleimide I (GF109203X) on bone resorption

Suk Kyeong Lee and Paula H. Stern

927 Inhibition of HIV-1 protease by a boron-modified polypeptide

Arman D. Pivazyan, Donald S. Matteson, Levente Fabry-Asztalos, Rajendra P. Singh, Pin-fang Lin, Wade Blair, Kenny Guo, Brett Robinson and William H. Prusoff

937 Preferential inhibition by (−)-epigallocetchin-3-gallate of the cell surface NADH oxidase and growth of transformed cells in culture

D. James Morré, Andrew Bridge, Lian-Ying Wu and Dorothy M. Morré

947 Role of disulfiram in the *in vitro* inhibition of rat liver mitochondrial aldehyde dehydrogenase

Maryann L. Shen, James J. Lipsky and Stephen Naylor

955 Effects of unsaturated side-chain analogs of tetrahydrocannabinol on cytochromes P450

Lester M. Bornheim

963 Validation of fluorouracil metabolite analysis in excised tumor: Liability of anabolites

James R. Bading, Antranik H. Shahinian, Melanie T. Paff, Paul B. Yoo and David W. Hsia

CHEMOTHERAPY AND METABOLIC INHIBITORS

969 Comparison of aromatic and tertiary amine *N*-oxides of acridine DNA intercalators as bioreductive drugs: Cytotoxicity, DNA binding, cellular uptake, and metabolism

Bronwyn G. Siim, Kevin O. Hicks, Susan M. Pullen, Pierre L. van Zijl, William A. Denny and William R. Wilson

979 Extracellular accumulation of nitric oxide, hydrogen peroxide, and glutamine in astrocytic cultures following glutathione depletion, complex I inhibition, and/or lipopolysaccharide-induced activation

Kevin St. P. McNaught and Peter Jenner

989 Effect of oral CDP-choline on plasma choline and uridine levels in humans

Richard J. Wurtman, Meredith Regan, Ismail Ulus and Lilly Yu

993 Apparent Involvement of the A_{2A} subtype adenosine receptor in the anti-inflammatory interactions of CGS 21680, cyclopentyladenosine, and IB-MECA with human neutrophils

Susanna S. Visser, Annette J. Theron, Grace Ramafi, James A. Ker and Ronald Anderson

CARDIOVASCULAR AND PULMONARY PHARMACOLOGY

1001 Antithrombotic and antiplatelet activities of 2-chloro-3-[4-(ethylcarboxy)-phenyl]-amino-1,4-naphthoquinone (NQ12), a newly synthesized 1,4-naphthoquinone derivative

Dong-Yeon Yuk, Chung-Kyu Ryu, Jin-Tae Hong, Kwang-Hoe Chung, Won-Seek Kang, Youngsoo Kim, Hwan-Soo Yoo, Myung-Koo Lee, Chong-Kil Lee and Yeo-Pyo Yun

15 OCTOBER 2000

Proceedings of the Biochemical Pharmacology Symposium, Luxemburg, January 26–29, 2000:

Signal Transduction Pathways and Regulation of Gene Expression as Therapeutic Targets

1009 Protein recruitment systems for the analysis of protein–protein interactions

Ami Aronheim

1015 c-Jun and the transcriptional control of neuronal apoptosis

Jonathan Ham, Andreas Eilers, Jonathan Whitfield, Stephen J. Neame and Bina Shah

1023 Therapeutic RNA and DNA enzymes

Mouldy Sioud and Marianne Leirdal

1027 Regulation of peroxisomal β-oxidation-dependent pathway by peroxisome proliferator-activator receptor α and kinases

Norbert Latruffe, Mustapha Cherkaoui Malki, Valérie Nicolas-Frances, Marie-Claude Clemencet, Brigitte Jannin and Jean-Pierre Berlot

1033 Apoptosis and nuclear factor-κB: A tale of association and dissociation

Bharat B. Aggarwal

1041 Regulation of nuclear factor-κB, activator protein-1, and glutathione levels by tumor necrosis factor α and dexamethasone in alveolar epithelial cells

Irfan Rahman

1051 Cell signaling and regulators of cell cycle as molecular targets for prostate cancer prevention by dietary agents

Rajesh Agarwal

1061 Inhibitors of prenylation of Ras and other G-proteins and their applications as therapeutics

Louis H. Cohen, Elsbet Pieterman, Rich E. W. van Leeuwen, Mark Overhand, Brigitte E. A. Burm, Gijs A. van der Marel and Jacques H. van Boom

1069 The integrin αIIb/β3 in human platelet signal transduction

Bernard Payrastre, Karine Missy, Catherine Trumel, Stéphane Bodin, Monique Plantavid and Hugues Chap

1075 Oxidative stress interference with the nuclear factor-κB activation pathways

Sonia Schoonbroodt and Jacques Piette

1085 Nuclear factor-κB, cancer, and apoptosis

Vincent Bours, Mohamed Bentires-Alj, Anne-Cécile Hellin, Patrick Viatour, Pierre Robe, Sylvie Delhalle, Valérie Benoit and Marie-Paule Merville

1091 Induction and regulation of epithelial–mesenchymal transitions

Brigitte Boyer, Ana Maria Vallés and Natacha Edme

1101 Inhibition of the type 1 insulin-like growth factor receptor expression and signalling: Novel strategies for anti-metastatic therapy

Pnina Brodt, Amir Samani and Roya Navab

1109 Nuclear factor-κB activation and innate response in microbial pathogen infection

Michael Naumann

1115 Integrin-linked kinase (ILK): A "hot" therapeutic target

T. Nathan Yoganathan, Penny Costello, Xiaoyi Chen, Mojgan Jabali, Jun Yan, Dan Leung, Zaihui Zhang, Arthur Lee, Shoukat Dedhar and Jasbinder Sanghera

1121 Gene regulation of heme oxygenase-1 as a therapeutic target

Stephan Immenschuh and Giuliano Ramadori

1129 The transcriptional signature of dioxin in human hepatoma HepG2 cells

Alvaro Puga, Andrew Maier and Mario Medvedovic

1143 A20 and A20-binding proteins as cellular inhibitors of nuclear factor-κB-dependent gene expression and apoptosis

Rudi Beyaeart, Karen Heyninck and Sofie van Huffel

1153 New insights into p53 regulation and gene therapy for cancer

Alain G. Zeimet, Karin Riha, Jennifer Berger, Martin Widschwendter, Martin Hermann, Günter Daxenbichler and Christian Marth

1165 Inhibitors of RAS signal transduction as antitumor agents

Christiane Garbay, Wang-Qing Liu, Michel Vidal and Bernard P. Roques

1171 Signaling angiogenesis via p42/p44 MAP kinase and hypoxia

Edurne Berra, Julie Milanini, Darren E. Richard, Maude Le Gall, Francesc Viñals, Emmanuel Gothié, Danièle Roux, Gilles Pagès and Jacques Pouysségur

1179 Cyclin A2 transcriptional regulation: Modulation of cell cycle control at the G1/S transition by peripheral cues

Jean-Marie Blanchard

1185 Signal transduction by tumor necrosis factor and gene regulation of the inflammatory cytokine interleukin-6

Wim Vanden Berghe, Linda Vermeulen, Gert de Wilde, Karolien De Bosscher, Elke Boone and Guy Haegeman

1197 The promyelocytic (PML) nuclear compartment and transcription control

Vassilis Doucas

1203 Nuclear tyrosine phosphorylation: The beginning of a map

Christophe Cans, Raffaella Mangano, Daniela Barilá, Gitte Neubauer and Giulio Supert-Furga

1217 Role of conformational alteration in the epidermal growth factor receptor (EGFR) function

Subal Bishayee

1225 Type 2A protein phosphatase, the complex regulator of numerous signaling pathways

Stanislaw Zolnierowicz

1237 Phosphorylation of the cap binding protein eIF4E by the MAPK-activated protein kinase Mnk1

Stéphane Pyronnet

1245 Role of the peroxisome proliferator-activated receptors (PPAR) in atherosclerosis

Bernadette P. Neve, Jean-Charles Fruchart and Bart Staels

1 NOVEMBER 2000

Commentary

1251 Structure-based drug design of non-nucleoside inhibitors for wild-type and drug-resistant HIV reverse transcriptase

Chen Mao, Elisa A. Sudbeck, T. K. Venkatachalam and Faith M. Uckun

MOLECULAR AND CELLULAR PHARMACOLOGY

1267 The stimulatory effects of cationic amphiphilic drugs on human platelets treated with thrombin

Pasupathy Tharmapathy, Miriam H. Fukami and Holm Holmsen

1279 Differential effects of fluoxetine on murine B-cell proliferation depending on the biochemical pathways triggered by distinct mitogens

Ana María Genaro, Valeria Ayelli Edgar and Leonor Sterin-Borda

1285 Profiles of antioxidant/electrophile response element (ARE/EpRE) nuclear protein binding and c-Ha-*ras* transactivation in vascular smooth muscle cells treated with oxidative metabolites of benzo[*a*]pyrene

Kimberly P. Miller, Yun-Houng Chen, Victoria L. Hastings, Christopher M. Bral and Kenneth S. Ramos

1297 Peroxide-like oxidant response in lungs of newborn guinea pigs following the parenteral infusion of a multivitamin preparation

Jean-Claude Lavoie, Sophie Laborie, Thérèse Rouleau, Monika Spalinger and Philippe Chessex

1305 Increased nucleotide excision repair in cisplatin-resistant ovarian cancer cells: Role of ERCC1-XPF

Katherine V. Ferry, Thomas C. Hamilton and Steven W. Johnson

1315 Inverse agonist properties of *N*-(piperidin-1-yl)-5-(4-chlorophenyl)-1-(2,4-dichlorophenyl)-4-methyl-1*H*-pyrazole-3-carboxamide HCl (SR14176A) and 1-(2-chlorophenyl)-4-cyano-5-(4-methoxyphenyl)-1*H*-pyrazole-3-carboxylic acid phenylamide (CP-272871) for the CB_1 cannabinoid receptor

Justin P. Meschler, Dennis M. Kraichely, Gerald H. Wilken and Allyn C. Howlett

1325 CYP3A-inducing agents and the attenuation of uroporphyrin accumulation and excretion in a rat model of porphyria cutanea tarda

Michael R. Franklin, John D. Phillips and James P. Kushner

1333 Characterization and effects of methyl-2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-3-isoquinoline carboxylate sulfate (T-1032), a novel potent inhibitor of cGMP-binding of cGMP-specific phosphodiesterase (PDE5)

Jun Kotera, Kotomi Fujishige, Hideo Michibata, Keizo Yuasa, Akira Kubo, Yoshinori Nakamura and Kenji Omori

1343 Prevention of cisplatin-DNA adduct repair and potentiation of cisplatin-induced apoptosis in ovarian carcinoma cells by proteasome inhibitors

Edward G. Mimnaugh, Manasses K. Yunmbam, Qingdi Li, Paolo Bonvini, Sang-Gu Hwang, Jane Trepel, Eddie Reed and Len Neckers

1355 Effects of resveratrol on the autophosphorylation of phorbol ester-responsive protein kinases: Inhibition of protein kinase D but not protein kinase C isozyme autophosphorylation

Jubilee Stewart, Karen L. Christman and Catherine A. O'Brian

1361 Correlation of a unique 220-kDa protein with vitamin D sensitivity in glioma cells

Jiangying Zou, Howard Landy, Lynn Feun, Rong Xu, Theodore Lampidis, Chun Jing Wu, A. J. Furst and Niramol Savaraj

CHEMOTHERAPY AND METABOLIC INHIBITORS

1367 Novel mechanisms of DNA toposiomerase II inhibition by pyranonaphthoquinone derivatives—eleutherin, α lapachone, and β lapachone

Preethi Krishnan and Kenneth F. Bastow

1381 Phosopholipids as multidrug resistance modulators of the transport of epirubicin in human intestinal epithelial Caco-2 cell layers and everted gut sacs of rats

Yu-Li Lo

HORMONES AND GROWTH FACTORS

1391 Promitogenic effects of ethanol, methanol, and ethanolamine in insulin-treated fibroblasts

Karan S. Crilly, Sandor Benyhe and Zoltan Kiss

CARDIOVASCULAR AND PULMONARY PHARMACOLOGY

1399 Inhibition of agonist-induced p42 and p38 mitogen-activated protein kinase phosphorylation and CD40 ligand/P-selectin expression by cyclic nucleotide-regulated pathways in human platelets

Ulrike R. Schwarz, Anna L. Kobsar, Mario Koksch, Ulrich Walter and Martin Eigenthaler

15 NOVEMBER 2000

Commentaries

1409 Use of *in vitro* methaemoglobin generation to study antioxidant status in the diabetic erythrocyte

Michael D. Coleman

1417 Pharmacology of the receptors for the phorbol ester tumor promoters: Multiple receptors with different biochemical properties

Marcelo G. Kazanietz, María J. Caloca, Pilar Eroles, Teruhiko Fujii, Maria L. García-Bermejo, Muredach Reilly and HongBin Wang

MOLECULAR AND CELLULAR PHARMACOLOGY

1425 Inhibition of cellular actio of thrombin by *N*3-cyclopropyl-7-{[4-(1-methylethyl}phenyl]methyl}-7*H*-pyrrolo[3,2-*f*]quinazoline-1,3-diamine (SCH 79797), a nonpeptide thrombin receptor antagonist

Ho-Sam Ahn, Carolyn Foster, George Boykow, Andrew Stamford, Mahua Manna and Michael Graziano

1435 Daunorubicin cardiotoxicity: Evidence for the importance of the quinone moiety in a free-radical-independent mechanism

Susan W. Shadle, Brad P. Bammel, Barry J. Cusack, Rebecca A. Knighton, Stephan Jay Olson, Phillip S. Mushlin and Richard D. Olson

1445 Potentiation of 1-β-D-arabinofuranosylcytosine-mediated mitochondrial damage and apoptosis in human leukemia cells (U937) overexpressing Bcl-2 by the kinase inhibitor 7-hydroxystaurosporine (UCN-01)

Lin Tang, Lawrence H. Boise, Paul Dent and Steven Grant

1457 Possible role of protein kinase C ζ in muscarinic receptor-induced proliferation of astrocytoma cells

Marina Guizzetti and Lucio G. Costa

1467 *In vitro* effects of Se-allylselenocysteine and Se-propylselenocysteine on cell growth, DNA integrity, and apoptosis

Zongjian Zhu, Weiqin Jiang, Howard E. Ganther, Clement Ip and Henry J. Thompson

1475 Inhibition by diallyl trisulfide, a garlic component, of intracellular Ca^{2+} mobilization without affecting inositol-1,4,5-trisphosphate (IP_3) formation in activated platelets

Ruomei Qi, Fulong Liao, Katsue Inoue, Yutaka Yatomi, Kaneo Sato and Yukio Ozaki

1485 Multidrug resistance protein functionality: No effect of intracellular or extracellular pH changes
Carole Marbeuf-Guete, Waldemar Priebe and Arlette Garnier-Suillerot

1491 Effect of ethanol on the expression of hepatic glutathione S-transferase: An *in vivo/in vitro* study
Tamara Vanhaecke, Kai O. Lindros, Teija Oinonen, Sandra Coecke, Gilda DeBast, Ian R. Phillips, Elizabeth A. Shepard, Antoine Vercruysse and Vera Rogiers

CHEMOTHERAPY AND METABOLIC INHIBITORS

1497 Characterisation of the antitrypanosomal activity of peptidyl α-aminoalkyl phosphonate diphenyl esters
Rory E. Morty, Linda Troeberg, James C. Powers, Shin Ono, John D. Lonsdale-Eccles and Theresa H. T. Coetzer

1505 Phosphorylation of the anti-HIV compound (*S,S*)-isodideoxyadenosine by human recombinant dexoycytidine kinase
Suresh Pal and Vasu Nair

GENE EXPRESSION AND DEVELOPMENT

1509 Selective induction of cytochrome P450 3A1 by dexamethasone in cultured rat hepatocytes: Analysis with a novel reverse transcriptase-polymerase chain reaction assay
Peter A.Chr 't Hoen, Jan N. M. Commandeur, Nico P. E. Vermeulen, Theo J. C. Van Berkel and Martin K. Bijsterbosch

HORMONES AND GROWTH FACTORS

1519 Obstacles to the prediction of estrogenicity from chemical structure: Assay-mediated metabolic transformation and the apparent promiscuous nature of the estrogen receptor
Robert Elsby, John Ashby, John P. Sumpter, A. Nigel Brooks, William D. Pennie, James L. Maggs, Paul A. Lefevre, Jenny Odum, Nicola Beresford, David Paton and B. Kevin Park

1531 Stimulation of hepatocyte growth factor production in human fibroblasts by the protein phosphatase inhibitor okadaic acid
Eiichi Gohda, Toshinori Nagao and Itaru Yamamoto

INFLAMMATION AND IMMUNOPHARMACOLOGY

1539 Synergy between ethanol and grape polyphenols, quercetin, and resveratrol, in the inhibition of the inducible nitric oxide synthase pathway
Marion Man-Ying Chan, John A. Mattiacci, Hyon S. Hwang, Amit Shah and Dunne Fong

1 DECEMBER 2000

Commentaries

1549 Can thermodynamic measurements of receptor binding yield information on drug affinity and efficacy?
Pier Andrea Borea, Alessandro Dalpiaz, Katia Varani, Paola Gilli and Gastone Gilli

1557 Angiotensin II type 1 receptor antagonists: Why do some of them produce insurmountable inhibition?
Patrick M. L. Vanderheyden, Frederik L. P. Fierens and Georges Vanquelin

MOLECULAR AND CELLULAR PHARMACOLOGY

1565 Prevention of nitrogen mustard-induced apoptosis in normal and transformed lymphocytes by ebselen
Vincent Holl, David Coelho, Luc Silbernagel, Jean-François Keyser, Caroline Waltzinger, Patrick Dufour and Pierre L. Bischoff

1579 Caspase-8 activation independent of CD95/CD95-L interaction during paclitaxel-induced apoptosis in human colon cancer cells (HT29-D4)
Anthony Gonçalves, Diane Braguer, Gérard Carles, Nicolas André, Charles Prevôt and Claudette Briand

1585 Extracellular ATP-dependent suppression of proliferation and induction of differentiation of human HL-60 leukemia cells by distinct mechanisms
Arthur D. Conigrave, Louise van der Weyden, Lowenna Holt, Lele Jiang, Paul Wilson, Richard I. Christopherson and Michael B. Morris

1593 The uncoupling efficiency and affinity of flavonoids for vesicles
Cees van Dijk, Arnold J. M. Driessen and Kees Recourt

1601 A comparison of the ontogeny of enterocytic and hepatic cytochromes P450 3A in the rat
Trevor N. Johnson, M. Stuart Tanner and Geoffrey T. Tucker

1611 Increased mRNA levels of xeroderma pigmentosum complementation group B (XPB) and Cockayne's syndrome complementation group B (CSB) without increased mRNA levels of multidrug-resistance gene (*MDR1*) or metallothionein-II (*MT-II*) in platinum-resistant human ovarian cancer tissues

Meenakshi Dabholkar, Keith Thornton, Justine Vionnet, Frieda Bostick-Bruton, Jing Jie Yu and Eddie Reed

1621 Catalytic inhibition of DNA topoisomerase II by *N*-benzylatdriamycin (AD 288)

Leonard Lothstein, D. Parker Suttle, J. Brent Roaten, Yoshihiro Koseki, Mervyn Israel and Trevor W. Sweatman

1629 Betaine aldehyde, betaine, and choline levels in rat livers during ethanol metabolism

Ming Kai Chern, Douglas A. Gage and Regina Pietruszko

1639 Up-regulation of mitochondrial peripheral benzodiazepine receptor expression by tumor necrosis factor alpha in testicular Leydig cells: Possible involvement in cell survival

Catherine Rey, Claire Mauduit, Olivier Naureils, Mohamed Benahmed, Pierre Louisot and Françoise Gasnier

1647 Serine and alanine mutagenesis of the nine native cysteine residues of the human A_1 adenosine receptor

D. Jason Scholl and Jack N. Wells

1655 Dependence of insulin secretion from permeabilized pancreatic β-cells on the activation of Ca^{2+}/calmodulin-dependent protein kinase II: A re-evaluation of inhibitor studies

Harshika S. Bhatt, Barry P. Conner, Garnesh Prasanna, Thomas Yorio and Richard A. Easom

1665 Comparative studies on the suppression of nitric oxide synthase by curcumin and its hydrogenated metabolites through down-regulation of IκB kinase and NFκB activation in macrophages

Min-Hsiung Pan, Shoei-Yn Lin-Shiau and Jen-Kun Lin

1677 Differential regulation of a fibroblast growth factor-binding protein by receptor-selective analogs of retinoic acid

Bryan J. Boyle, Violaine K. Harris, Emmanuelle D. E. Liaudet-Coopman, Anna T. Riegel and Anton Wellstein

CHEMOTHERAPY AND METABOLIC INHIBITORS

1685 Activation of c-Jun N-terminal kinase 1 (JNK1) in mistole lectin II-induced apoptosis of human myeloleukemic U937 cells

Raekil Park, Myung-Sunny Kim, Hong-Seob So, Byung-Hak Jung, Sun-Rock Moon, Sang-Young Chung, Chang-Bo Ko, Bok Ryang Kim and Hun-Taeg Chung

1693 3-*m*-Bromoacetylamino benzoic acid ethyl ester: A new cancericidal agent that activates the apoptotic pathway through caspase-9

Michael Schlesinger, Jian-Dong Jiang, Julia P. Roboz, Larry Denner, Yi-He Ling, James F. Holland and J. George Bekesi

NEUROSCIENCE

1703 Effects of transient ethanol exposure on the incorporation of [^{3}H]ethanolamine into plasmalogen in the differentiating CG-4 oligodendrocyte cell line

Evgeny Bichenkov and John S. Ellingson

HORMONES AND GROWTH FACTORS

1713 Sulfation of iodothyronines by human sulfotransferase 1C1 (SULT1C1)

Xinying Li, Dahn L. Clemens and Robert J. Anderson

INFLAMMATION AND IMMUNOPHARMACOLOGY

1717 Pharmacology of IgE-mediated desensitization of human basophils: Effects of protein kinase C and Src-family kinase inhibitors

Donald MacGlashan, Jr., Katsushi Miura and Sandra Lavens-Phillips

GASTROINTESTINAL AND RENAL PHARMACOLOGY

1729 Renal toxicity caused by cisplatinum in glutathione-depleted metallothionein-null mice

Masahiko Satoh, Akinori Shimada, Baoxu Zhang and Chiharu Tohyama

15 DECEMBER 2000

Commentaries

1735 The physiopathological significance of ceruloplasmin: A possible therapeutic approach

Giovanni Floris, Rosaria Medda, Alessandra Padiglia and Giovanni Musci

1743 Diverse signalling by 5-hydroxytryptamine (5-HT) receptors
Petrus J. Pauwels

MOLECULAR AND CELLULAR PHARMACOLOGY

1751 Apoptosis induced by calcein acetoxymethyl ester in the human histiocytic lymphoma cell line U-937 GTB
Gunnar Liminga, Petra Martinsson, Bertil Jonsson, Peter Nygren and Rolf Larsson

1761 Modification of natural, double-helical DNA by antitumor *cis-* and *trans-*$[Cl_2(Me_2SO_4)_4Ru]$ in cell-free media
Olga Nováková, Ctirad Hofr and Viktor Brabec

1773 Comparative effects of acute ethanol dosage on liver and muscle protein metabolism
Matthew E. Reilly, David Mantle, Jonathan Salisbury, Timothy J. Peters and Victor R. Preedy

1787 Effect of maturation and aging on β-adrenergic signal transduction in rat kidney and liver
Norbert Fraeyman, Eric Van de Velde, Ann Van Ermen, Ariane Bazan, Patrick Vanderheyden, John Van Emmelo and Joël Vandekerckhove

1797 The effects of phenothiazines and other calmodulin antagonists on the sarcoplasmic and endoplasmic reticulum Ca^{2+} pumps
Shahla Zafar Khan, Clare L. Longland and Francesco Michelangeli

1807 Serum-dependent effects of tamoxifen and cannabinoids upon C6 glioma cell viability
Stig O. P. Jacobsson, Eva Rongård, Maria Stridh, Gunnar Tiger and Christopher J. Fowler

1815 Binding properties of three neuropeptide Y receptor subtypes from Zebrafish: Comparison with mammalian Y1 receptors
Magnus M. Berglund, Ingrid Lundell, Chiara Cabrele, Claudine Serradeil-Le Gal, Annette G. Beck-Sickinger and Dan Larhammar

1823 Down-regulation of *brc-abl* amd *bcl-*x_L expression in a leukemia cell line and its doxorubicin-resistant variant by topoisomerase II inhibitors
Audrey Laroche-Clary, Annick Larrue and Jacques Robert

1829 Inactivation of human arylamine *N*-acetyltransferase 1 by the hydroxylamine of *p*-aminobenzoic acid
Neville J. Butcher, Kenneth F. Ilett and Rodney F. Minchin

1837 Down-modulation through protein kinase C-α of lipopolysaccharide-induced expression of membrane CD14 in mouse bone marrow granulocytes
Thierry Pedron, Robert Girard and Richard Chaby

1845 Pharmacodynamic approach to study the gene transfer process employing non-viral vectors
Salvador F. Aliño, Ester Escrig, Fernando Revert, Vicent M. Guillem and Antonio Crespo

1855 Reversible and potent uncoupling of hog gastric $(H^+ + K^+)$-ATPase by prodigiosins
Hidekazu Matsuya, Masayuki Okamoto, Takahiro Ochi, Asako Nishikawa, Sakae Shimizu, Takao Kataoka, Kazuo Nagai, Harry H. Wasserman and Shoji Ohkuma

1865 Anticancer activity evaluation of the *Solanum* glycoalkaloid solamargine: Triggering apoptosis in human hepatoma cells
Kou-Wha Kuo, Shu-Hui Hsu, Yun-Ping Li, Wei-Ling Lin, Li-Feng Liu, Li-Ching Chang, Chih-Chao Lin, Chun-Nan Lin and Hamm-Ming Sheu

1875 Involvement of the extracellular signal-regulated protein kinase (ERK) pathway in the induction of apoptosis by cadmium chloride in CCRF-CEM cells
Yoshihisa Iryo, Masato Matsuoka, Bambang Wispriyono, Tsutomu Sugiura and Hideki Igisu

1883 Change in caspase-3-like protease in the liver and plasma during a rat liver regeneration following partial hepatectomy
Shoko Hayami, Maki Yaita, Yukako Ogiri, Fang Sun, Rieko Nakata and Shosuke Kojo

CHEMOTHERAPY AND METABOLIC INHIBITORS

1887 Induction of cell cycle-dependent cytotoxicity and apoptosis by new heterodinucleoside phosphate dimers of 5-fluorodeoxyuridine in PC-3 human prostate cancer cells
Rosanna M. C. Cattaneo-Pangrazzi, Herbert Schott, Heidi Wunderli-Allenspach, Michela Derighetti and Reto A. Schwendener

1897 ρ^0 tumor cells: A model for studying whether mitochondria are targets for rhodamine 123, doxorubicin, and other drugs
Yan-Ping Hu, Carlos T. Moraes, Niramol Savaraj, Waldemar Priebe and Theodore J. Lampidis

1907 Interaction of guanine phosphonomethoxyalkyl derivatives with GMP kinase isoenzymes
Romana Krejčová, Květoslava Horská, Ivan Votruba and Antonín Holý

1915 Lack of glutathione conjugation to adriamycin in human breast cancer MCF-7/DOX cells: Inhibition of glutathione S-transferase P1–1 by glutathione conjugates from anthracyclines
Giorgio Gaudiano, Tad H. Koch, Mario Lo Bello, Marzia Nuccetelli, Giampietro Ravagnan, Annalucia Serafino and Paola Sinibaldi-Vallebona

1925 Metabolism of 4′-thio-β-D-arabinofuranosylcytosine in CEM cells
William B. Parker, Sue C. Shaddix, Lucy M. Rose, William R. Waud, Donna S. Shewach, Kamal N. Tiwari and John A. Secrist III

1933 Electron paramagnetic resonance spectrometry evidence for bioreduction of tirapazamine to oxidising free radicals under anaerobic conditions
Laurence H. Patterson and Fatai A. Taiwo

HORMONES AND GROWTH FACTORS

1937 Structure-specific control of differentiation and apoptosis of human promyelocytic leukemia (HL-60) cells by A-ring diastereomers of 2-methyl-1α,25-dihydroxyvitamin D_3 and its 20-epimer
Kimie Nakagawa, Mayuko Kurobe, Katsuhiro Konno, Toshie Fujishima, Hiroaki Takayama, and Toshio Okano

INFLAMMATION AND IMMUNOPHARMACOLOGY

1949 Effect of antibody against integrin α4 on bleomycin-induced pulmonary fibrosis in mice
Qingjian Wang, Yingjin Wang, Dallas M. Hyde, Philip J. Gotwals, Roy R. Lobb, Sarah T. Ryan and Shri N. Giri

CARDIOVASCULAR AND PULMONARY PHARMACOLOGY

1959 Ca^{2+}-channel blockers and nucleoside triphosphate diphosphohydrolase (NTPDase) influence of diltiazem, nifedipine, and verapamil
Fernand-Pierre Gendron, Jean-Gilles Latour, Denis Gravel, Yuan Wang and Adrien R. Beaudoin

GASTROINTESTINAL AND RENAL PHARMACOLOGY

1967 Characterization and inhibition by a wide range of xenobiotics of organic anion excretion by primary human hepatocytes
Léa Payen, Arnaud Courtois, Jean-Pierre Campion, André Guillouzo and Olivier Fardel

1977 Contents for Volume 60

1993 Author Index for Volume 60

1999 Subject Index for Volume 60